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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,473	02/11/2002	Paul C. Brown	27242.5	4365

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HAYNES AND BOONE, LLP  
901 MAIN STREET, SUITE 3100  
DALLAS, TX 75202

EXAMINER

TAYLOR, BARRY W

ART UNIT PAPER NUMBER

2643

DATE MAILED: 06/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/073,473

Applicant(s)

BROWN, PAUL C.

Examiner

Barry W Taylor

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ingalsbe et al (6,556,661 hereinafter Ingalsbe) in view of Greenwood et al (5,245,343 hereinafter Greenwood).

Regarding claim 1. Ingalsbe teaches a telecom test device (see figure 1) for connecting to a telephone line carrying an information stream (col. 1 line 43), the device comprising:

a measurement system connected to device (see 10 figures 1 and 2), wherein the measurement system can make a determination (col. 2 line 17 – col. 3 line 45, col. 4 lines 25-67);

a first circuit (see microcontroller 14 figure 2) for determining a transmission technology from the determination (col. 3 lines 28-30, col. 5 lines 22-29, col. 6 lines 32-52, col. 7 lines 10-14, col. 8 line 65 – col. 12, col. 10 lines 15-22); and

a second circuit for selectively connecting the device to the telephone line in response to the determination of the transmission of the transmission technology (col. 3 lines 28-30, col. 5 lines 22-29, col. 6 lines 32-52, col. 7 lines 10-14, col. 8 line 65 – col. 12, col. 10 lines 15-22).

Ingalsbe does not explicitly show determining the minimum period from the counted pulses (i.e. information stream).

Greenwood teaches conversion process for digital signals wherein circuitry used for converting signals with finite precision and at minimum cost (col. 1 lines 50-53, lines 65-67, col. 2 lines 30-40). Greenwood discloses the circuitry is particularly valuable for control system application (col. 2 line 48, col. 8 lines 9-31) wherein the circuitry places less demands on op amp and allows for a slower, less costly or more realizable op amp (col. 3 lines 10-14) and makes more accurate conversions possible (col. 3 lines 15-43). Greenwood discloses the circuitry provides an output, which is directly interfaceable with standard microcontroller or microprocessor (col. 3 lines 44-52). Greenwood teaches the conversion circuitry extracts both duty cycle density information and inter-bit phasing information in a single decimation cycle without the need for digital filter as well as providing for a highly accurate adaptive counting window (col. 4 lines 7-24). Greenwood invention is centered on using shift register (see 40 figure 4) for determining pulse widths of digital data stream (col. 5 lines 3-35, col. 6 lines 25-42, col. 8 lines 7-45, col. 9 lines 25-65, col. 9 line 66 – col. 10 line 38, col. 16 lines 17-59, col. 17 lines 25-61, col. 18 line 61 – col. 19 line 29).

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to modify the test device as taught by Ingalsbe to incorporate shift registers as taught by Greenwood for the benefit of providing accurate serial digital data to the microcontroller.

Regarding claim 2. Ingalsbe teaches microcontroller (see 14 figure 2).

Regarding claims 3 and 6-8. Ingalsbe teaches external indicator (col. 1 lines 53-60, col. 2 line 33).

Regarding claim 4. Ingalsbe does not explicitly show using register for taking digital snap shot.

Greenwood teaches conversion process for digital signals wherein circuitry used for converting signals with finite precision and at minimum cost (col. 1 lines 50-53, lines 65-67, col. 2 lines 30-40). Greenwood discloses the circuitry is particularly valuable for control system application (col. 2 line 48, col. 8 lines 9-31) wherein the circuitry places less demands on op amp and allows for a slower, less costly or more realizable op amp (col. 3 lines 10-14) and makes more accurate conversions possible (col. 3 lines 15-43). Greenwood discloses the circuitry provides an output, which is directly interfaceable with standard microcontroller or microprocessor (col. 3 lines 44-52). Greenwood teaches the conversion circuitry extracts both duty cycle density information and inter-bit phasing information in a single decimation cycle without the need for digital filter as well as providing for a highly accurate adaptive counting window (col. 4 lines 7-24). Greenwood invention is centered on using shift register (see 40 figure 4) for determining pulse widths of digital data stream (col. 5 lines 3-35, col. 6 lines 25-42, col. 8 lines 7-45, col. 9 lines 25-65, col. 9 line 66 – col. 10 line 38, col. 16 lines 17-59, col. 17 lines 25-61, col. 18 line 61 – col. 19 line 29).

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to modify the test device as taught by Ingalsbe to incorporate shift registers as taught by Greenwood for the benefit of providing accurate serial digital data to the microcontroller.

Regarding claim 5. Ingalsbe teaches selectively prevents data (col. 2 lines 17-20).

Regarding claim 9. Ingalsbe teaches manual override (col. 6 lines 50-53).

Method claims 12-19 are rejected for the same reasons as apparatus claims 1-9 since the recited apparatus would perform the claimed method steps.

Software claims 10-11 are rejected for the same reasons as apparatus claims 1-9 and method claims 12-19 since the recited method and apparatus would perform the claimed software routine.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W. Taylor whose telephone number is (703) 305-4811. The examiner can normally be reached on Monday-Friday from 6:30am to 4pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on (703) 305-4708. The fax phone number for this Group is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 customer service Office whose telephone number is (703) 306-0377.

  
CURTIS KUNTZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600